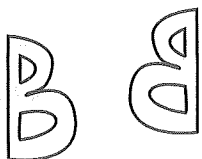


Practice A

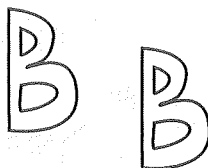
For use with pages 152–159

Decide whether the figure on the right is a translation of the figure on the left.

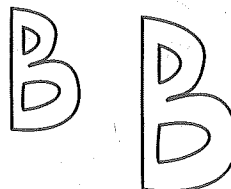
1.



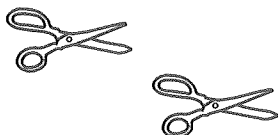
2.



3.



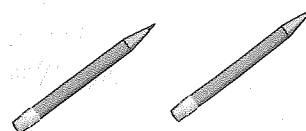
4.



5.



6.



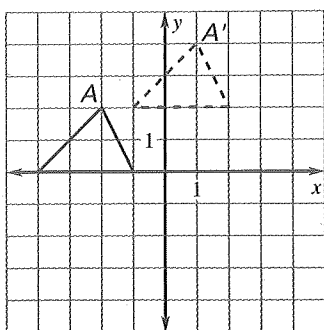
Match the description of the translation with its diagram.

7. 4 units to the right and 2 units down

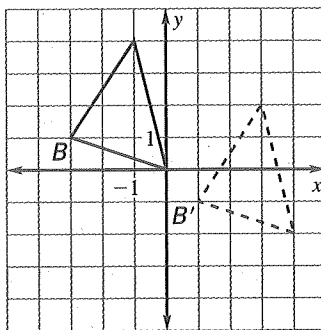
8. 3 units to the right and 2 units up

9. 2 units to the left and 3 units down

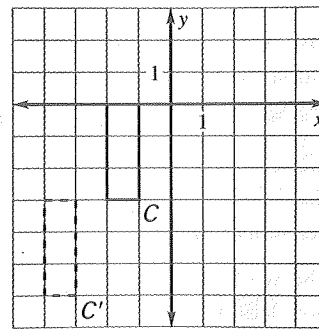
A.



B.

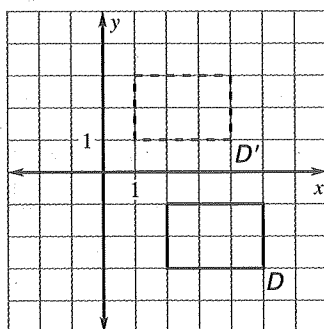


C.

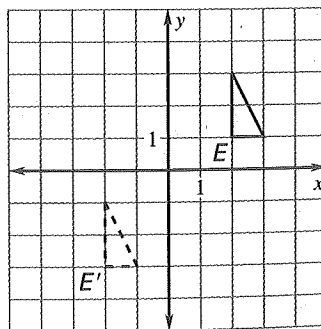


In Exercises 10–12, describe the translation using words. Then describe the translation using coordinate notation.

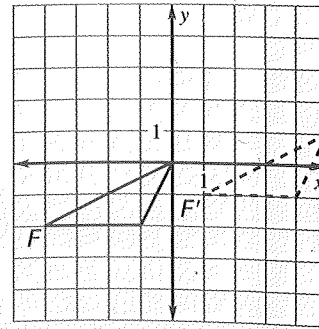
10.



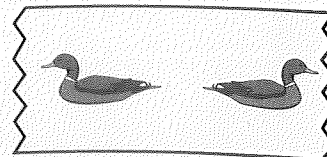
11.



12.



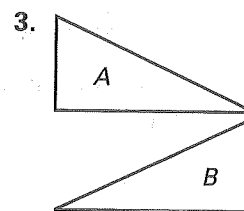
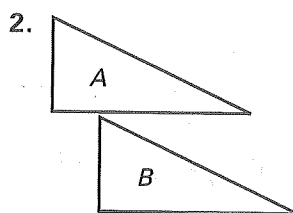
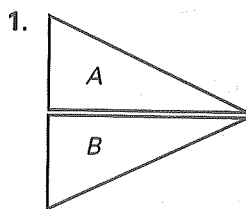
13. The sketch at right shows a portion of a wallpaper border. Is the duck on the left a translation of the duck on the right?



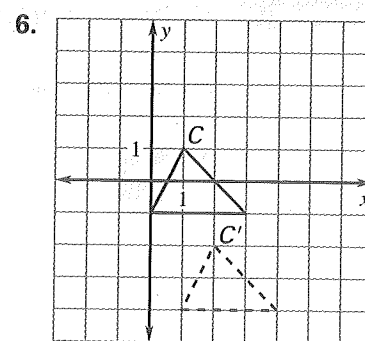
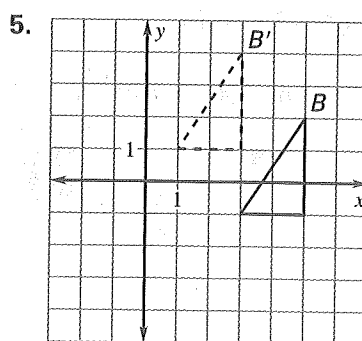
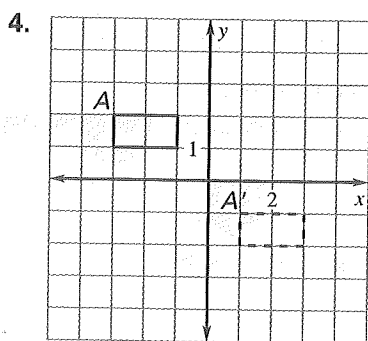
Practice B

For use with pages 152–159

Decide whether Figure A is a translation of Figure B.

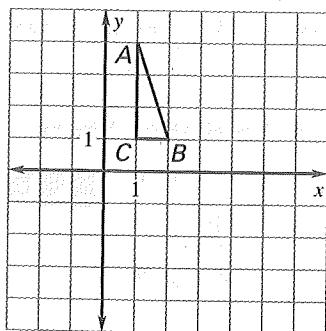


Describe the translation using words. Then describe the translation using coordinate notation.

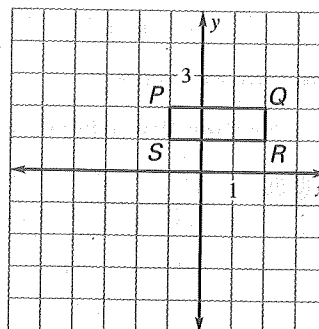


Draw the image of the figure after the given translation.

7. $(x, y) \rightarrow (x + 2, y - 2)$



8. $(x, y) \rightarrow (x - 4, y - 1)$



In Exercises 9–11, find the image of the point using the translation $(x, y) \rightarrow (x + 2, y - 2)$.

9. $(0, 8)$

10. $(-5, 7)$

11. $(-2, 2)$

12. The company logo for Cramer Corporation is shown. Is the figure on the right a translation of the figure on the left?

